### Podiatrists Consumer Fact Sheet

# **Board of Registration in Podiatry**

Podiatry deals with medical and surgical treatment of foot disorders. The Board of Registration in Podiatry evaluates the qualifications of applicants for licensure and grants licenses to those who qualify. It establishes rules and regulations to ensure the integrity and competence of licensed podiatrists. The Board is the link between the consumer and the licensed podiatrist and, as such, promotes the public health, welfare and safety.

## **Podiatrists**

The podiatrist...

- Examines, diagnoses and treats or prescribes course of treatment for patients with disorders, diseases or injuries of the foot;
- Interviews patients and writes case histories to determine previous ailments, complaints and areas of investigation.
- Examines footwear to determine proper fit, evidence of proper gait, and corrective care or treatment required;
- Conducts physical examination of the foot, including tissue, bone and muscular structure with emphasis on the relationship to diabetes, peripheral vascular disease and patho-mechanical disease;
- Supplements examination by arranging for various laboratory tests, analyses and diagnostic procedures, including X-rays;
- In consultation with the chief of the service of the health care facility, or with an individual with clinical privileges designated by him, interprets laboratory results and evaluates examination findings;
- Refers patients to, or consults with, house physicians for further case diagnoses or treatment;
- Administers treatment to eliminate pressure lesions, infections and contagious diseases affecting the foot;
- Performs appropriate therapeutic surgical procedures;
- Prescribes appropriate medication; instructs nurses and other assistants in treatment and care of patients;
- Prescribes and supervises construction and maintenance of orthotic foot devices and fabricates special appliances to foot or in footgear to meet the needs of individual patients;
- Applies appliances to foot or in footwear;
- Initiates other podiatric procedures or services and advises patients on proper care of feet and nail prophylaxis;
- Reviews and studies case history and progress of patient;
- Consults with surgeons and residents in establishing a therapeutic program for the patient;
- Records data or case history on medical records;
- Advises on kind and quality of podiatric medical supplies and equipment required.

## **Detecting a Foot Problem**

In most cases, pain or excessive foot fatigue will alert you that you may have a foot problem. In the "normal" foot, moderate levels of activity do not cause sore or tired feet. Although overuse may cause foot fatigue, it rarely causes pain. If the foot problem persists after you have rested, consult a podiatrist. Putting even a normal foot into inappropriate shoes may cause foot problems. Painful corns, calluses and bunions may result from improper shoes. The podiatrist can usually make you comfortable, and educate you about proper footwear. Infants and youngsters may have foot problems that cause little or no pain. These are often first noticed by alert parents, who see some abnormality of gait or foot structure. Early intervention by the podiatrist may correct the problem or prevent it from progressing.

## **Orthotics**

Podiatrists prescribe and construct foot orthotics. These are specially designed devices that are worn inside the shoe to control abnormal foot function and/or accommodate painful areas of the foot. Properly designed foot orthotics may compensate for impaired foot function, by controlling abnormal motion across the joints of the foot. This may result in dramatic improvement in foot symptoms.

Functional foot orthotics are usually made from rigid materials, especially plastics and carbon-fiber composites. They are constructed upon a plaster impression of the feet, and modified based on the podiatrist's evaluation of your problem. They are normally quite comfortable, and do not feel hard or uncomfortable in the shoe.

Rigid orthotics normally last for years, additions such as top covers and extensions may require periodic replacement. Some patients, for example the very elderly, may not tolerate rigid functional orthotics. Under these circumstances, the podiatrist will prescribe an orthotic made from softer materials with special accommodations for painful areas. Many different materials can be utilized, such as rubber, cork, leather, and soft synthetic plastics. The podiatrist is in the unique position of being able to evaluate, diagnose, and treat your foot or leg problems. If orthotics are indicated, he or she can utilize the most advanced methods of construction.

Orthotics that are prescribed by the podiatrist and custom made for your feet, should not be confused with over the counter arch supports. These may help the occasional patient with minor arch discomfort, but they frequently fail because they do not properly control foot function and/or do not properly fit the patient's feet.

The consumer should beware of individuals with no or inadequate training, who hold themselves out as experts on foot problems and orthotics. Only the podiatrist, chiropodist, or medical doctor can diagnose foot problems and offer

alternative treatment plans. If complications develop, the podiatrist is there to evaluate and treat those. He or she can offer the patient alternative treatments, be they medical, orthopedic, or surgical.

### **Common Foot Ailments**

Not all feet are created equal! Some feet seem to take much abuse without complaining, many are not so lucky. Some people have sore feet in spite of wearing comfortable shoes and only moderate levels of activity. Ill fitting or improper shoes may cause foot discomfort. However, the foot itself may be the problem. The human foot contains about 26 bones and numerous joints, ligaments, muscles, and tendons. It is a complex structure that isn't always ideally suited to weight bearing and ambulation. We all have unique feet, and place unique demands upon them. The average person takes about 5000 steps a day, and walks 50,000 miles in a lifetime! Our lifestyle, what shoes we wear and how active we are, clearly affect our risk of foot problems. The young foot is more resilient, and may easily recover from minor injuries. Wear and tear eventually take their toll, and tissues lose their ability to fully recover. Hence, foot complaints become more prevalent as we age.

Your general health may adversely affect your feet. Some common examples are diabetes, arthritis, poor circulation, stroke, and osteoporosis. In fact, your podiatrist may be the first to recognize a serious health problem from an examination of your feet. Obesity may adversely affect your feet. Some types of heel and arch problems are more prevalent among overweight persons.

All feet are different, but most fall into three basic types:

- "Normal" (Rectus) Foot- Structure and alignment of the foot are well configured for the demands of daily living. Excessive wear, exceptional demands or improper shoes can make this foot injured or painful.
- High Arched (Supinated) Foot This type of foot is poor at absorbing shock. These people are prone to problems of
  the entire lower extremity and back. Such feet often develop severely clawed toes and extensive plantar calluses.
- Flat (Pronated) Feet This is one of the more common problems treated by the podiatrist. These people are prone to develop tired feet, arch strain, arthritis, and various structural deformities.

Foot pain has a multitude of causes. Your podiatrist can assess your problem, and treat it appropriately. If your foot problem has a mechanical origin, he or she may recommend functional foot orthotics. These are special supports that may compensate for structural problems, and eliminate or reduce discomfort.

## **Burning Feet**

There are two types of burning feet, those that feel like they are burning, but are not actually hot, and those that are actually increased in temperature. Anything that increases the flow of blood to the feet will warm them. This may result from exercise, alcohol consumption, some vascular disorders, inflammation, and infection. Anything that insulates the foot can reduced heat loss and increase the temperature of the feet, for example socks, stockings and shoes. The false perception of "hot" feet is due to changes in the nervous system. This may occur in the peripheral nerves, spinal cord, or brain. Nerve tissue may be damages by age, impaired circulation, injury, or mechanical irritation. Conditions such as diabetes mellitus, alcohol abuse, and nutritional deficiencies may damage nerves and result in the feeling of burning feet. In some cases nerve damage is reversible. Your podiatrist may help to determine the cause of your burning feet, or direct you to the proper specialist. In spite of medical evaluation, the cause of burning feet is sometimes never determined.

### **Sweaty Feet**

Excessive perspiration on the sole of the foot and between the toes (hyperhydrosis) is a common problem. In some cases it is related to mental stress and nervousness, especially in adolescents and young adults. Systemic diseases such as anemia and hyperthyroidism may be associated with hyperhydrosis. The excessive perspiration may be improved by:

- Foot soaks in warm water
- Wearing absorbent socks or hose (eg. cotton or wool)
- Avoid synthetics such as nylon and orlon
- Changing socks or hose a few times during the day
- Wear leather shoes; avoid those made of synthetics
- Apply an antiperspirant preparation containing 15 25% aluminum chloride
- Use an absorbent foot powder

Stubborn cases may be treated by your podiatrist with prescription medications. Substances that contain or convert into nontoxic doses of formaldehyde are often employed.

#### **Foot Odor**

Foot odor (bromhydrosis) is caused by the bacterial decomposition of normal secretions of the sweat glands. We all have a "garden" of bacteria that normally live on our skin. People with excessive foot perspiration are predisposed to

this problem. Treatment is usually aimed at control of the sweating. Foot soaks in a solution containing a mild antibacterial agent (eg. Tersaseptic®) may be helpful.

#### **Bunions**

Bunions are a common deformity of the forefoot. They may occur in either sex, and any culture, but are most common in women who wear narrow-toed dress shoes. A bunion is a displacement of the joint between the big toe and the long bone just behind it (the first metatarsal) toward the mid-line of the body. This joint begins to bulge on the inside of the foot and the big toe drifts in the opposite direction, sometimes coming to rest over or under the smaller toes. It seems that many factors can influence the development of a bunion deformity (hallux abducto valgus). There may be a familial tendency to the deformity. Genetics may play an important, though not simple role. Abnormal flattening of the arch and turning out of the foot (pronation) during gait may encourage the development of a bunion. The wearing of constrictive and/or high-heeled shoes can aggravate the problem. Pain often results from shoe pressure or abnormal weight bearing due to the deformity. It is important that your bunions be properly evaluated by a podiatrist. He or she may be able to relieve pain by medications or protecting the area from pressure. Special supports, called orthotics, by help correct abnormal gait and stop further deformity. Any existing deformity can not be corrected without surgery. Many patients simply live with their bunions, taking care to wear orthotics and proper shoes. Other patients require surgery. Many procedures exist for the correction of hallux abducto valgus. Your podiatric surgeon can recommend if surgery is right for you and, if so, select the appropriate procedure.

#### **Corns and Calluses**

Both involve excessive production of dead skin cells. This is the uppermost layer of the skin that protects it from external injury. For corns and calluses, this production is the result of intermittent pressure, from shoes or weight bearing. The skin responds to this pressure by thickening. Initially this "toughening" of the skin is helpful, but over time it builds up and becomes an irritant. Increased mass of the lesion results in increased pressure and discomfort. A vicious cycle develops which is only broken by relieving the pressure or reducing the lesion. Corns usually are on the toes, and result from shoe pressure. Calluses are usually on weight bearing areas on the bottom (plantar) surface of the foot, and result from weight bearing and/or abnormal alignment of the metatarsal bones in the ball of the foot. Both terms are expressions of the same type of lesion, which is medically termed a hyperkeratosis. Both corns and calluses may have a deeper central core, known to the podiatrist as a nucleation. This can be the site of exquisite tenderness. This core is not the "root" of the lesion, in the sense that removing this will keep the lesion from returning. It is simply the area of greatest pressure, often corresponding to a prominence of the underlining bone. Reducing this with sharp instruments and applying accommodative pads and tape, the podiatrist relieves discomfort

and dissipates pressure. Unless something is done to permanently relieve pressure, the lesion will redevelop.

Permanent relief is sometimes achieved by changing shoes, orthotics, or surgery to remove bony prominences and realign bones.

### **Toenail Problems**

Toenail problems are common complaints in the podiatrist's office. They include thickening, brittleness, discoloration, and ingrown toenails. Nails, like hair, are an appendage of the skin. They are formed by layered sheets of protein with traces of other substances. Contrary to popular belief, there is very little calcium in nails. The normal toenail may be from 0.05 to 1.0 mm thick, and grows its full length in about six to twelve months. Nails are harder than skin, due to their high sulfur content and lack to water. The normal nail is translucent, and one can see the underlying pink nail bed.

Thickening and discoloration are often the sign of a diseased nail. With aging, the toenails thicken, grow more slowly, and become more susceptible to disease. Injury, infection, and disease may affect the toenails. The toenails and surrounding tissues are susceptible to day to day small repetitive injuries, for example in confining shoes. Changes in the underlying bone can cause deforming forces on the nail plate. A common affliction of the nails is fungus infection. This may cause a thickening and degeneration of the nail plate. A microscopic examination and culture of a nail sample may help confirm the diagnosis. This is a difficult problem to treat. You podiatrist may prescribe therapy with oral anti-fungal medication. The ingrown toenail is another common problem that presents itself to the podiatrist's office. Infection may result from improper cutting of the toenails, or injury to the surrounding skin from an incurvated or deformed nail plate. Your podiatrist may simply trim the offending nail border. Some patients require regular expert nail care by the podiatrist. In many cases a simple nail surgery can permanently correct the problem.

#### **Plantars Warts**

A wart that appears on the bottom (plantar) surface of the foot may closely resemble a callus. Thick layers of dead skin may overlay a plantar wart. They may appear on non-weight bearing areas, and can usually be distinguished from calluses by the podiatrist. When a wart is reduced with a sharp blade, near the surface of the skin it appears to consist of numerous small folds packed together. These may contain a small back spot at the apex of the loop. Warts may bleed easily when pared with a sharp blade. Warts, also known as verruca, are caused by a virus. They are probably transmitted by expose of the skin to the virus, for example on the floor of a public shower. Warts can also appear on the top surface of the foot. Here they tend to grow out from the skin, and are more easily recognized. The

interval from exposure to seeing a wart may be many months. Warts on the top of the foot may be treated with various over the counter wart medicines. If they fail to resolve in a few weeks consult your podiatrist or physician. Plantar warts tend to be more difficult to treat. Various methods can be utilized, such as excision, freezing, burning, strong acids, laser, etc. These are often performed under local anesthesia. Unfortunately, warts have a high recurrence rate, and may require additional treatment.

#### **Flat Feet**

The human foot is a complicated structure, consisting of about 26 bones, numerous joint, ligaments, muscles and tendons. Each set of feet are unique, but may share certain basic structural qualities. Flat feet are low arched and fairly common. Most flat feet are what podiatrists term pronated. Closer examination of the weight-bearing pronated foot reveals:

- Turning out of the heel bone away from the center of the body
- Inward rotation of the leg
- Bulging of the inner aspect of the ankle
- Shifting of the forefoot outward from the heel

Flat feet may be the result of abnormality in the alignment of bones, excessive elasticity of the ligaments, muscle imbalance, or some combination of these. To complicate matters further, not all pronated feet appear flat, and some feet that appear flat are not pronated. Flat feet may be severe and apparent at birth; these may require corrective treatment with plaster casts or surgery. More commonly flat (pronated) feet develop during youth, symptoms may develop anytime, and some flat feet never become troublesome. They may run in families, but there is no certainty they will develop.

Pronated feet alter the alignment of the foot, ankle, leg, pelvis, and lower back. Problems may develop at any level. The pronated foot is unstable. This results in excessive and abnormal motion across joints, and may result in fatigue and strain - often describes as "tired feet". Long tern consequences include; arthritis, bunions, heel spurs, Morton's neuroma, and other deformities. Shin splints (pain in the muscles of the lower leg) may result from these muscles overworking in an attempt to compensate for foot instability.

This is a complex deformity that should be properly evaluated by a podiatrist. He or she may recommend functional posted foot orthotics. These are special supports that help compensate for mechanical faults, and allow your feet to function with improved efficiency. Orthotics relieve stress from compromised joints, ligaments, and muscles. Deforming forces acting on the foot are diminished.

## Filing a Complaint

While the majority of licensed podiatrists conduct themselves as true professionals, the Division of Professional Licensure will take action against those licensed by a board of registration who fail to maintain acceptable standards of competence and integrity.

In many cases, complaints are made by dissatisfied consumers - but, dissatisfaction alone is not proof of incompetence or sufficient grounds for disciplinary action. Cases are evaluated on the basis of evidence. The more evidence presented, the stronger the complaint.

If you have a serious complaint against a podiatrist, call or write the Division's Office of Investigations and ask for a complaint form. Or download a copy of the  $\underline{\text{complaint form}}$ .

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